L8 ANSWER 1 OF 4 USPATFULL on STN

CLM What is claimed is:

2. The composition according to claim 1, wherein the lipid consists of a mixture of esterified glycerol and phospholipid.

ACCESSION NUMBER:

2006:49212 USPATFULL

TITLE:

INVENTOR (S):

Material for bone reconstruction Larsson, Cecilia, Goteborg, SWEDEN

Ljusberg-Wahren, Helena, Hollviken, SWEDEN

PATENT ASSIGNEE(S):

Nobel Biocare AB (publ.), Gothenburg, SWEDEN (non-U.S.

corporation)

APPLICATION INFO.:

US 2001-743762 19990706 (9)

WO 1999-SE1231 19990706

20010514 PCT 371 date

NUMBER DATE

PRIORITY INFORMATION:

SE 1998-2529 19980713

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: ASSISTANT EXAMINER: McDermott, Corrine Matthews, William H

LEGAL REPRESENTATIVE:

Connolly Bove Lodge & Hutz LLP

NUMBER OF CLAIMS: 26 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS:

5 Drawing Figure(s); 5 Drawing Page(s)

LINE COUNT:

609

L4 ANSWER 15 OF 18 USPATFULL on STN

SUMM . . . noted from labelled uptake studies that the 9,11 isomer appears to be somewhat preferentially taken up and incorporated into the **phospholipid** fraction of animal tissues, and to a lesser extent

the 10,12 isomer. (See Ha, et al., Cancer Res., 50: 1097. . .

SUMM Linoleic acid is an important component of biolipids, and comprises a significant proportion of triglycerides and **phospholipids**.

Linoleic acid is known as an "essential" fatty acid, meaning that the animal must obtain it from exogenous dietary sources. . .

SUMM . . . is preferred because of its high native 9,12 linoleic acid content, but also because of low levels of sterols, contaminating **phospholipids**, and other residues that tend to foul the processing equipment and result in a less pure final product. Other seed. . .

DETD . . . herein, the term "oral delivery vehicle" refers to any means of delivering a pharmaceutical orally, including, but not limited to, capsules, pills, tablets and syrups.

DETD . . . but have greater soluability in aqueous cellular environments and can participate in alternative molecular synthetic pathways such as synthesis of **phospholipids** or other funtional lipids. In contrast, triglycerides are frequently deposited intact in cell membranes or storage vesicles. Thus, the administration. . .

DETD . . . preferred embodiment, administration is oral. The CLA may be formulated with suitable carriers such as starch, sucrose or lactose in tablets, pills, dragees, capsules, solutions, liquids, slurries, suspensions and emulsions. The CLA may be provided in aqueous solution, oily solution, or in any of the other forms discussed above. The tablet or capsule of the present invention may be coated with an enteric coating which dissolves at a pH of about 6.0 to. . . intestine but not in the stomach is cellulose acetate phthalate. In some embodiments, the CLA is provided as soft gelatin capsules containing 750 mg 80% CLA (Tonalin.TM.). The CLA may also be provided by any of a number of other routes,. .

CLM What is claimed is:

alkyl ester to conjugated linoleic alkylester at low temperature;
acidifying by addition of an aqueous acid; and molecularly distilling said conjugated linoleic acid alkyl

esters to form purified conjugated linoleic acid alkyl esters.

ACCESSION NUMBER: 2002:152815 USPATFULL

TITLE: Conjugated linoleic acid compositions and methods of

making same

INVENTOR(S): Saebo, Asgeir, Oersta, NORWAY

Skarie, Carl, Detroit Lakes, MN, United States Jerome, Daria, Owatonna, MN, United States Haroldsson, Gudmunder, Reykjavik, ICELAND

PATENT ASSIGNEE(S): Conlinco, Inc., Detroit Lakes, MN, United States (U.S.

corporation)

APPLICATION INFO.: US 1999-270940 19990317 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1998-132593, filed on 11 Aug 1998 Continuation-in-part of Ser. No. US 1998-160416, filed on 25 Sep 1998 Continuation-in-part of Ser. No. US 1998-42538, filed on 17 Mar 1998, now

abandoned Continuation-in-part of Ser. No. US

L8 ANSWER 14 OF 16 USPATFULL on STN AB . coenzyme Q10, piper nigrum extract, and alpha lipoic acid. In a preferred embodiment, the supplement also includes minor amounts of conjugated linoleic acid and phosphatidylserine/phosphatidylcholine complex. SUMM . metals, and piper nigrum extract which increases the uptake of nutrients and their metabolic utilization. The supplement also preferably includes conjugated linoleic acid (CLA), a natural fatty acid that reduces body fat and increases muscle tone by helping the body extract more energy. [0021] In a preferred embodiment of the invention, the dietary SUMM supplement also includes conjugated linoleic acid (about 00.5% to 1.5% by weight) and a phosphatidylserine/phosphatidylcholine complex (about 0.25% to 0.35% by weight). Conjugated linoleic acid (CLA) is an essential fatty acid that reduces body fat and increases muscle tone by helping the body extract more energy from less food. While CLA is believed to be commercially available from a number of sources, one commercial product is marketed under the designation "Tonalin" by PharmaNutrients, Inc., Norway. Studies with CLA have revealed as much as a 20% reduction in body fat resulting from the ingestion of CLA, and other studies have shown that it acts as an active anti-carcinogen. DETD XT12) about 61.9%, fructose 27.7%, amino acid premix (consisting of 1-leucine 1-glutamine, 1-alanine, glycine, 1-arginine, 1-lysine and orinthine alpha-ketoglutarate) 2.7%, CLA (Tonalin) 0.1%, phosphatatidylserine/phosphatidylcholine complex (Corti PS 20) 0.3%, medium chain triglyceride (MCT) powder 1.9%, creatine monohydrate 1.9%, 1-carnitine 0.2%, grape seed extract (ActiVin). CLM What is claimed is: The dietary supplement of claim 1 in which said mixture also includes 0.05% to 0.15% conjugated linoleic acid. 10. A soy-based performance-enhancing dietary supplement comprising an essentially dry mixture of the following ingredients in a daily serving . . alpha-ketoglutarate, about 1.9% medium chain triglycerides, about 1.9% creatine monohydrate; about 0.2% 1-carnitine; about 0.2% grape seed extract, about 0.1% conjugated linoleic acid, about 0.3% phosphatidylserine/ phosphatidylcholine complex, about 0.03% coenzyme Q10, about 0.01% piper nigrum extract, about 0.0002% alpha lipoic acid, about 1.3% lecithin, and about. ACCESSION NUMBER: 2001:205429 USPATFULL PERFORMANCE-ENHANCING DIETARY SUPPLEMENT TITLE: INVENTOR (S): HASTINGS, CARL W, GLENCOE, MO, United States BARNES, DAVID J, WILDWOOD, MO, United States DALEY, CHRISTINE A, COLUMBIA, IL, United States KIND NUMBER DATE

PATENT INFORMATION: US 2001041187 A1 20011115

APPLICATION INFO.: US 1998-175748 A1 19981020 (9)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: MARSHALL, O'TOOLE, GERSTEIN, MURRAY & BORUN, 600 SEARS

TOWER, 233 WACKER DRIVE, CHICAGO, IL, 60606-6402

NUMBER OF CLAIMS: 10

EXEMPLARY CLAIM: 1 LINE COUNT: 440

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
L24
    ANSWER 19 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
AN
     1997:493640 CAPLUS
DN
     127:171192
ED.
     Entered STN: 06 Aug 1997
TI
     Conjugated linoleic acid modulation of phorbol ester-induced
     events in murine keratinocytes
     Liu, Kai-Li; Belury, Martha A.
ΑU
CS
     Department of Foods and Nutrition, Purdue University, West Lafayette, IN,
     47906, USA
SO -
     Lipids (1997), 32(7), 725-730
     CODEN: LPDSAP; ISSN: 0024-4201
PB ·
     AOCS Press
DT
     Journal
     English
LA
CC
     1-6 (Pharmacology)
     Section cross-reference(s): 17, 18
     The chemoprotective fatty acid, conjugated linoleic acid (CLA),
     inhibits phorbol ester skin tumor promotion in mice. Because little is
     known about the deposition of CLA into tissues and its biol. activity,
     this study compared the incorporation and biol. activity of CLA to
     linoleic acid (LA) and arachidonic acid (AA) in cultured murine HEL-30
     keratinocytes. When HEL-30 cells were grown in media containing 14C-CLA, >50%
     of the 14C-CLA was incorporated into cellular lipids by 9 h. The
     distribution of CLA in phospholipid classes was similar to the
     distribution of LA. Approx. 50% of 14C-LA and 14C-CLA were incorporated
     into phosphatidylcholines (PC), while the remainder was taken up by
     phosphatidylethanolamines (PE) and phosphatidylserines/phosphatidylinosito
     ls (PS/PI). In contrast, 14C-AA was more equitably distributed into PC,
     PE, or PS/PI (27, 30, or 38%, resp.). When keratinocytes were prelabeled
     with 14C-fatty acids, phorbol ester-induced release of 14C-CLA was 1.5
     times higher than that of 14C-LA and 14C-AA. However, 14C-prostaglandin E
     (PGE) release in 14C-CLA prelabeled cultures was 6 and 13 times lower than
     in cultures treated with 14C-LA and 14C-AA, resp. The ability of
     nonlabeled CLA to support the ornithine decarboxylase activity, a hallmark
     event of tumor promotion, was significantly lower than in LA- and
     AA-treated cultures. CLA may inhibit skin tumor promotion by a
     PGE-dependent mechanism.
     conjugated linoleate keratinocyte metab tumor promotion;
     ornithine decarboxylase keratinocyte conjugated linoleate
     antitumor; phospholipid conjugated linoleate keratinocyte tumor
     promotion; prostaglandin E keratinocyte conjugated linoleate
     carcinogenesis; antitumor conjugated linoleate keratinocyte
     prostaglandin E
     Prostaglandins
     RL: BPR (Biological process); BSU (Biological study, unclassified); MFM
     (Metabolic formation); BIOL (Biological study); FORM (Formation,
     nonpreparative); PROC (Process)
        (E; conjugated linoleic acid modulation of phorbol
        ester-induced events in murine keratinocytes)
IT
     Antitumor agents
     Transformation, neoplastic
        (conjugated linoleic acid modulation of phorbol ester-induced
        events in murine keratinocytes)
IT
     Glycerides, biological studies
       Phosphatidylcholines, biological studies
       Phosphatidylethanolamines, biological studies
       Phosphatidylinositols
       Phosphatidylserines
       Phospholipids, biological studies
     RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological
     study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC
     (Process)
        (conjugated linoleic acid modulation of
```

phorbol ester-induced events in murine keratinocytes)

IT Skin

(keratinocyte; conjugated linoleic acid modulation of phorbol ester-induced events in murine keratinocytes)

IT 26764-25-0, Octadecadienoic acid

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(Conjugated; conjugated linoleic acid modulation of phorbol ester-induced events in murine keratinocytes)

IT 9024-60-6, Ornithine decarboxylase

RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)

(conjugated linoleic acid modulation of phorbol ester-induced events in murine keratinocytes)

IT 60-33-3, Linoleic acid, biological studies 506-32-1, Arachidonic acid RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(conjugated linoleic acid modulation of phorbol ester-induced events in murine keratinocytes)

```
L24 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN .
AN
     1993:537878 CAPLUS
DN
     119:137878
ED
     Entered STN: 02 Oct 1993
     Prooxidant effect of oxidation products of tocopherol in milk fat during
ΤI
AU
     Nath, B. Surendra; Usha, M. A.; Murthy, M. K. Rama
CS
     Natl. Dairy Res. Inst., Bangalore, 560 030, India
so
     Indian Journal of Dairy Science (1992), 45(12), 667-70
     CODEN: IJDSAI; ISSN: 0019-5146
DT
     Journal
LΑ
     English
CC
     17-8 (Food and Feed Chemistry)
     Milk fat and its triglycerides were added with oxidation products of
AB
     tocopherol (OPT) isolated by TLC, at 4, 10 and 20 ppm which corresponded
     to 10, 25 and 50% of the amts. of naturally occurring tocopherol and were
     stored at 60°. The addition of OPT increased the rate of autoxidn. of
     milk fat which was proportional to the amts. of OPT added. Similarly, the
     addition of OPT to cis-linoleic acid Me ester also enhanced the rate of
     increase in diene conjugation during storage. The prooxidant
     nature of OPT found in this study explains the observation made that the
     induction period of milk fat gets terminated even though the major portion
     of original tocopherol remains intact. The addition of phospholipids
     and BHT reduced the prooxidant activity of OPT in milk fat, its
     triglycerides and cis-linoleic acid Me ester
ST
     milk fat autoxidn tocopherol prooxidant
ΙT
     Oxidation, aut-
        (of milk fat during storage, tocopherol oxidation product as prooxidant
        in)
IT
     Tocopherols
     RL: BIOL (Biological study)
        (oxidation products, as milk fat prooxidant)
IT
     Fats and Glyceridic oils
     RL: BIOL (Biological study)
        (milk, autoxidn. during storage of, tocopherol oxidation product
        prooxidant effect in)
L24 ANSWER 21 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
AN
    ·1987:531812 CAPLUS
DN
     107:131812
ED
     Entered STN: 17 Oct 1987
     Recognition of cervical neoplasia by the estimation of a free-radical
TI
     reaction product (octadeca-9,11-dienoic acid) in exfoliated cells
ΑU
     Tay, S. K.; Singer, A.; Griffin, J. F. A.; Wickens, D. G.; Dormandy, T. L.
CS
     Dep. Ostet. Gynaecol., Whittington Hosp., London, N19 5NF, UK
     Free Radical Research Communications (1987), 3(1-5), 27-31
SO
     CODEN: FRRCEX; ISSN: 8755-0199
DT
     Journal
LΑ
     English
CC
     14-1 (Mammalian Pathological Biochemistry)
AB
     The molar ratio between a diene-conjugated linoleic-
     acid isomer [18:2(9,11)] and the parent linoleic
     acid [18:2(9,12)], both esterified as
     phospholipids, was significantly different in exfoliated cells
     from normal cervices and from cervices with colposcopic and cytol.
     evidence of precancer. The ratio was increased in the precancer group.
     The measurement may provide a simple and perhaps improved alternative to
     cytol. screening.
ST
     octadecadienoate uterus cervix neoplasia diagnosis
IT
     Uterus, neoplasm
        (cervix, preneoplasia, octadecadienoate-linoleate ratio of exfoliated
        cells in human, diagnosis in relation to)
```

IT 1839-11-8, Octadeca-9,11-dienoic acid

RL: BIOL (Biological study)

(-linoleate ratio, of precancerous cells of uterine cervix of human, diagnosis in relation to)

IT 60-33-3, Linoleic acid, biological studies

RL: BIOL (Biological study)

(-octadecadienoate ratio, of precancerous cells of uterine cervix of human, diagnosis in relation to)

```
R 17 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
AN
     2000:143164 CAPLUS
DN
     133:30141
ED
     Entered STN: 03 Mar 2000
TΙ
     Effect of dietary fat supplements on levels of n-3 poly-unsaturated fatty
     acids, trans acids and conjugated linoleic acid in bovine milk
     Offer, N. W.; Marsden, M.; Dixon, J.; Speake, B. K.; Thacker, F. E.
AU
CS
     Food Systems Division, Scottish Agricultural College, Auchincruive, Ayr,
     KA6 5HW, UK
SO
     Animal Science (1999), 69(3), 613-625
     CODEN: ANSCFO; ISSN: 1357-7298
PΒ
     British Society of Animal Science
DT
     Journal
LA
     English
CC
     18-5 (Animal Nutrition)
AB
     The effects of 3 fat supplements on milk yield and composition were measured
     using 12 mid-lactation in-calf Holstein-Friesian cows in a balanced
     incomplete change-over design over 3 periods each of 3 wk. All cows
     received a basal diet consisting of 36 kg/day grass silage (dry matter
     (DM) 270 g/kg, metabolizable energy (ME) 11.6 MJ/kg DM) and 7 kg/day of a
     concentrate mixture containing (g/kg) rolled barley (501), molassed sugar-beet
pulp
     shreds (277), soya-bean meal (208) and a standard cow mineral supplement (14).
     Treatments were CON (control-no supplement); LIN and FISH (250 g/ day of
     either linseed oil or marine oil, providing approx. 0.046 of ME intake) or
     TOA (95 g/day of tuna orbital oil, providing 0.018 of total ME intake).
     There were no significant effects on silage DM intake or milk yield (means
     9.25 and 17.2 kg/day resp.). The FISH and TOA treatments depressed milk fat concentration (45.4, 44.6, 34.5, and 41.6 (s.e.d. 1.08) g/kg for CON, LIN,
     FISH, and TOA resp.; note - the same treatment order is used for all
     results quoted). Compared with values for CON, yield of fat (g/day) was
     greater for LIN and lower for FISH (739, 808, 572 and 732, s.e.d. 28.7).
     All 3 oil supplements reduced milk protein content (33.6, 32.5, 30.6, and
     32.4 (s.e.d. 0.43) g/kg) but, apart from a small increase for LIN, protein
     yield (g/day) was unaffected (545, 586, 510 and 574, s.e.d. 20.2).
     concns. (g/100 g) of short-chain fatty acids (\leqC14) and C16 : 0 in
     milk fat were lower (P < 0.05) for LIN than for the other treatments.
     supplements increased the concns. of C18:1, the value for LIN being
     greater than for the other treatments (21.0, 27.2, 25.3 and 23.7, s.e.d.
            The FISH and TOA treatments increased the concns. of long chain
     (\geq C20) (n-3) poly-unsatd. fatty acids (PUFA), (0.19, 0.17, 0.49 and
     0.27, s.e.d. 0.026) but less than proportionately 0.03 of dietary intake
     of these acids was transferred to milk, probably because they were found
     to be mostly in the phospholipid and cholesterol ester
     fractions of blood plasma. The FISH and TOA treatments increased the
     percentages of total trans fatty acids in milk fat (1.13, 2.19, 10.26 and
     3.62, s.e.d. 0.728) while a significant increase in conjugated
     linoleic acid (CLA) was observed only for FISH (0.16, 0.28,
     1.55, and 0.52, s.e.d. 0.154). Concns. of CLA and total trans acids in
     milk were highly correlated while trans acids in milk were inversely
     correlated with milk fat content supporting the theory that milk fat
     depression may be caused by increased supply of trans fatty acids to the
     mammary gland. The health implications of these changes in milk fat
     composition are discussed.
ST
     milk fat polyunsatd fatty acid cattle nutrition fish oil; linseed oil
     nutrition cattle milk fat polyunsatd fatty acid
IT
     Glycerides, biological studies
     Lipids, biological studies
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (blood; dietary fat effect on n-3 poly-unsatd. fatty acids, trans acids
        and conjugated linoleic acid in bovine milk and blood)
```

IT Cattle Feeding experiment

Milk

Nutrition, animal

(dietary fat effect on n-3 poly-unsatd. fatty acids, trans acids and conjugated linoleic acid in bovine milk and blood)

IT Linseed oil

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(dietary fat effect on n-3 poly-unsatd. fatty acids, trans acids and conjugated linoleic acid in bovine milk and blood)

IT Phospholipids, biological studies

RL: BPR (Biological process); BSU (Bio

The following are valid formats:

```
L4
     ANSWER 10 OF 18 USPATFULL on STN
SUMM
            . noted from labeled uptake studies that the 9,11 isomer appears
       to be somewhat preferentially taken up and incorporated into the
       phospholipid fraction of animal tissues, and to a lesser extent
       the 10,12 isomer. (Ha, et al., Cancer Res., 50: 1097 [1990]).
SUMM
       [0007] Linoleic acid is an important component of biolipids, and
       comprises a significant proportion of triglycerides and
       phospholipids. Linoleic acid is known as an "essential" fatty
       acid, meaning that the animal must obtain it from exogenous dietary
       sources.
SUMM
                embodiments, the composition comprises less than 1.0%
       trans-trans fatty acid isomers on molar basis. In some embodiments, food
       products or capsules comprising the conjugated linoleic acid
       compositions are provided.
SUMM
            . embodiments, the composition comprises less than 1.0%
       trans-trans fatty acid isomers on molar basis. In some embodiments, food
       products or capsules comprising the conjugated linoleic acid
       compositions are provided.
SUMM
       . . . embodiments, the composition comprises less than 1.0%
       trans-trans fatty acid isomers on molar basis. In some embodiments, food
       products or capsules comprising the conjugated linoleic acid
       compositions are provided.
SUMM
       . . . embodiments, the composition comprises less than 1.0%
       trans-trans fatty acid isomers on molar basis. In some embodiments, food
       products or capsules comprising the conjugated linoleic acid
       compositions are provided.
SUMM
       . . . embodiments, the composition comprises less than 1.0%
       trans-trans fatty acid isomers on molar basis. In some embodiments, food
       products or capsules comprising the conjugated linoleic acid
       compositions are provided.
         . . herein, the term "oral delivery vehicle" refers to any means of
SUMM
       delivering a pharmaceutical orally, including, but not limited to,
       capsules, pills, tablets and syrups.
SUMM
          . . embodiments, administration is oral. The CLA moieties may be
       formulated with suitable carriers such as starch, sucrose or lactose in
       tablets, pills, dragees, capsules, solutions, liquids,
       slurries, suspensions and emulsions. Preferably, the CLA formulations
       contain antioxidants, including, but not limited to Controx, Covi-OX,
       lecithin, . . . The CLA may be provided in aqueous solution, oily
       solution, or in any of the other forms discussed above. The
       tablet or capsule of the present invention may be
      coated with an enteric coating which dissolves at a pH of about 6.0 to.
             intestine but not in the stomach is cellulose acetate phthalate.
       In some embodiments, the CLA is provided as soft gelatin
      capsules containing about 750 mg CLA. The CLA may also be
      provided by any of a number of other routes, including,.
CLM
      What is claimed is:
       1. A method for producing conjugated linoleic
      acid with a high acid value comprising: a) providing: i) a
      composition comprising esters of linoleic acid; and ii) an
      alcoholate catalyst; b) treating said composition comprising
      esters of linoleic acid with said alcoholate catalyst to produce
      a conjugated linoleic acid ester
      composition; c) treating said conjugated linoleic
      acid ester composition with alkali to produce a
      saponified conjugated linoleic acid
      composition; and d) treating said saponified conjugated
      linoleic acid composition with a mild acid wash to
      produce a free conjugated fatty acid composition.
```

13. The conjugated linoleic acid composition of claim 10, wherein said composition is substantially free of esters of conjugated linoleic

- 16. A capsule containing the conjugated linoleic acid composition of claim 10.
- 17. A method for producing conjugated linoleic acid with a high acid value comprising: a) providing: i) a composition comprising esters of linoleic acid; and ii) an alcoholate catalyst; b) treating said composition comprising esters of linoleic acid with said alcoholate catalyst to produce a conjugated linoleic acid ester composition; c) treating said conjugated linoleic acid ester composition with alkali under conditions such that a saponified conjugated linoleic acid composition comprising residual alcohol is produced; d) injecting a strong acid solution into said saponified conjugated linoleic acid composition under conditions such that an oil phase comprising free conjugated fatty acids and a water phase are produced; and. 27. The conjugated linoleic acid composition of claim 24, wherein said composition is substantially free of esters of conjugated linoleic acid.
- 30. A capsule containing the conjugated linoleic acid composition of claim 24.
- 39. The conjugated linoleic acid composition of claim 36, wherein said composition is substantially free of esters of conjugated linoleic acid.
- 42. A capsule containing the conjugated linoleic acid composition of claim 36.
- 50. The conjugated linoleic acid composition of claim 47, wherein said composition is substantially free of esters of conjugated linoleic acid.
- 53. A capsule containing the conjugated linoleic acid composition of claim 47.
- 54. A method for producing conjugated linoleic acid with a high acid value comprising: a) providing: i) a composition comprising esters of linoleic acid; and ii) an alcoholate catalyst; b) treating said composition comprising esters of linoleic acid with said alcoholate catalyst to produce a conjugated linoleic acid ester composition; c) treating said conjugated linoleic acid ester composition with alkali to produce a saponified conjugated linoleic acid composition comprising residual alcohol; d) removing said ethanol from said saponified conjugated linoleic acid composition; and e) treating said saponified conjugated linoleic acid composition with an acid solution to produce a free conjugated fatty acid composition.
- 62. The conjugated linoleic acid composition of claim 59, wherein said composition is substantially free of esters of conjugated linoleic acid.
- 65. A capsule containing the conjugated linoleic acid

composition of claim 59.

ACCESSION NUMBER: 2004:77219 USPATFULL

TITLE: CONJUGATED LINOLEIC ACID COMPOSITIONS

INVENTOR(S): Saebo, Asgeir, Eidsnes, NORWAY

Saebo, Per·Christian, Volda, NORWAY

PATENT ASSIGNEE(S): Natural ASA, Sandvika, NORWAY (non-U.S. corporation)

NUMBER KIND DATE
-----PATENT INFORMATION: US 2004058998 A1 20040325
US 6743931 B2 20040601

APPLICATION INFO.: US 2002-253216 A1 20020924 (10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: MEDLEN & CARROLL, LLP, 101 Howard Street, Suite 350,

San Francisco, CA, 94105

NUMBER OF CLAIMS: 65 EXEMPLARY CLAIM: 1 LINE COUNT: 1140

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

## L4 ANSWER 11 OF 18 USPATFULL on STN

SUMM . . . eating habit. Moreover, these nutrients have also commercially been supplied or distributed in the form of health foods such as tablets and supplements, but there have not yet been solved many problems concerning, for instance, absorbability, stability and price of these.

SUMM . . . applied to the skin and ointments (such as pastes, liniments, lotions). In addition, examples of orally administered pharmaceutical preparations are tablets for internal use (such as naked tablets, sugar-coated tablets, coating tablets, enteric coated tablets and chewable tablets), tablets administered through oral cavity (such as buccal preparations, sublingual tablets, troches and adhesive tablets), powders, capsules (such as hard capsules and soft capsules) and granules (such as coated granules, pills, troches, solutions or pharmaceutically acceptable sustained release preparations thereof). In addition, examples of. . .

SUMM [0077] When preparing a tablet and a granule, they may optionally be coated with at least one layer of sucrose, gelatin, hydroxypropyl cellulose, purified shellac,. . . acid cellulose acetate, hydroxypropyl methyl cellulose phthalate, and methyl methacrylate, methacrylic acid polymers. Further, they may likewise be encapsulated into capsules of, for instance, ethyl cellulose or gelatin.

SUMM . . . specific examples thereof are ferulic acids and derivatives thereof such as tocopherols, tocotrienols and  $\gamma$ -oryzanols; polyphenols such as lignans, sterois, **phospholipids**, oleuropein and tyrosol; and triterpenes such as oleanolic acid and maslinic acid.

DETD Tablet

DETD . . . The foregoing components were sufficiently admixed together in a mixing ratio specified above and the resulting mixture was compressed into tablets.

DETD Capsule

DETD . . . The foregoing components were sufficiently admixed together in the mixing ratio specified above and the resulting mixture was encapsulated into capsules.

DETD Soft Capsule

DETD . . . components were sufficiently admixed together in the mixing ratio specified above and the resulting mixture was encapsulated to give

```
soft capsules.
CLM
      What is claimed is:
       . 10. The improver for bone metabolism of claim 7, wherein the
       conjugated fatty acid constituting the chain isoprenoid fatty acid
       esters is a member selected from the group consisting of
       conjugated linoleic acid and
       \alpha-eleostearic acid.
                       2004:77216 USPATFULL
ACCESSION NUMBER:
                       Agent for improving bone metabolism
TITLE:
                       Shinohara, Gou, Yokosuka-shi, JAPAN
INVENTOR(S):
                       Tsuchiya, Kin-Ya, Yokosuka-shi, JAPAN
                       Yamanouchi, Katsuaki, Yokosuka-shi, JAPAN
                       Inui, Toshiyuki, Yokosuka-shi, JAPAN
PATENT ASSIGNEE(S):
                       The Nisshin Oillio, Ltd. (non-U.S. corporation)
                            NUMBER
                                       KIND
                                              DATE
                       PATENT INFORMATION:
                       US 2004058995
                                        A1
                                               20040325
APPLICATION INFO.:
                       US 2003-669470
                                        A1
                                               20030925 (10)
RELATED APPLN. INFO.:
                       Continuation of Ser. No. WO 2002-JP3187, filed on 29
                       Mar 2002, UNKNOWN
                             NUMBER
                                          DATE
                       -----
PRIORITY INFORMATION:
                       JP 2001-101821
                                         20010330
DOCUMENT TYPE:
                       Utility
FILE SEGMENT:
                       APPLICATION
LEGAL REPRESENTATIVE:
                       BURNS DOANE SWECKER & MATHIS L L P, POST OFFICE BOX
                       1404, ALEXANDRIA, VA, 22313-1404
NUMBER OF CLAIMS:
EXEMPLARY CLAIM:
LINE COUNT:
                       2039
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 12 OF 18 USPATFULL on STN
AB
       . . and (I 2) can be obtained by subjecting an organic material,
      selected from free fatty acids, mono di or triglycerides,
      phospholipids, alkylesters or waxesters, containing at least 5
      weight % of these conjugated polyunsaturated fatty acids, to an enzymic
      conversion (acidolysis,.
SUMM
         . . (i)
                               free fatty acids with,
                        (a) mono-or polyalcohols, or
                        (b) mono, - di - triglycerides, or
                        (c) alkylesters, or
                        (d) phospholipids
         (ii)
                        mono, - di - or triglycerides with:
                        (a) water, or
                        (b) mono-or polyalcohols, or
                        (c) alkylesters, or
                        (d) phospholipids
         (iii)
                        phospholipids with:
                        (a) water, or
                        (b) alkylesters, or
                        (c) other phospholipids, or
                        (d) mono- or polyols
                        alkylesters, or wax-esters with:
         (iv)
                        (a) water, or
                        (b) mono- or polyols, or
                        (a) free fatty acids, or
                        (d) phospholipids,
         . . preferably at least 10 wt %, most preferably at least 15 wt %
SUMM
```

of conjugated polyunsaturated fatty acids and a phospholipid

or a mono, -di- or triglyceride. SUMM . . of low alkylesters, a mixture of monoglycerides, or diglycerides or triglycerides or mono, -di- and triglycerides, or a mixture of phospholipids, or a mixture of one or more components of said mixtures. SUMM . can be obtained by using our fats or blends. Therefore foodsupplements or pharmaceutical products, that are in the form of capsules or other forms, suitable for enteral or parenteral application and that comprise a product obtainable according to the process of. CLM What is claimed is: 1. Process for the preparation of materials B, containing geometrical isomers of conjugated linoleic acid moieties in a specific ratio X.sub.B, wherein a material A, containing at least 5 wt % of geometrical isomers of conjugated linoleic acid moieties, comprising at least two different geometrical isomers L.sub.1 and L.sub.2 in a weight ratio L.sub.1:L.sub.2=X.sub.A, is subjected to at. . . acids as material A with: (a) mono-or polyalcohols, or (b) mono, - di - triglycerides, or (c) alkylesters, or (d) phospholipids (ii) mono, - di - or triglycerides as material A with: (a) water, or (b) mono-or polyalcohols, or (c) alkylesters, or (d) phospholipids (iii) phospholipids as material A with: (a) water, or (b) alkylesters, or (c) other phospholipids, or (d) mono- or polyols (iv) alkylesters, or wax-esters as material Α with: (a) water, or (b) mono- or polyols, or (c) free fatty acids, or

(d) phospholipids, wherein a lipase is applied, that has the ability to discriminate between L.sub.1 and L.sub.2, which conversion results in a. . . preferably at least 1.2 X.sub.A, most preferably at least 1.3 X.sub.A, wherein L.sub.1 and L.sub.2 are different geometrical isomers of conjugated linoleic acid.

- . %, preferably at least 10 wt %, most preferably at least 15 wt % of conjugated linoleic acid and a **phospholipid** or a mono, -di- or triglyceride.
- . of low alkylesters, a mixture of monoglycerides, or diglycerides or triglycerides or mono, -di- and triglycerides, or a mixture of **phospholipids**, or a mixture of one or more components of said mixtures.
- 14. Foodsupplements of pharmaceutical products, wherein the supplements of pharmaceutical products are in the form of capsules or pharmaceutical compositions, suitable for enternal or parental applications and wherein the supplements or pharmaceutical products comprises a product obtainable. . .

ACCESSION NUMBER:

2003:17412 USPATFULL

TITLE:

Process for the preparation of materials with a high content of long chain polyunsaturated fatty acids

INVENTOR(S):

Cain, Frederick William, Wormerveer, NETHERLANDS Moore, Stephen Raymond, Bedford, UNITED KINGDOM Mcneill, Gerald Patrick, Bedford, UNITED KINGDOM Zwemmer, Olga Cornelia, Wormerveer, UNITED KINGDOM

NUMBER KIND DATE -----US 2003013164 A1 PATENT INFORMATION: 20030116 US 6692762 B2 20040217

APPLICATION INFO.:

US 2000-500475 A1 20000209 (9)

Continuation of Ser. No. US 1998-68154, filed on 30 Sep RELATED APPLN. INFO.:

1998, GRANTED, Pat. No. US 6184009 A 371 of

International Ser. No. WO 1996-EP5024, filed on 12 Nov

1996, UNKNOWN

DATE NUMBER EP 1995-308228

PRIORITY INFORMATION:

Utility

19951114

DOCUMENT TYPE: FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

MORGAN LEWIS & BOCKIUS LLP, 1111 PENNSYLVANIA AVENUE

NW, WASHINGTON, DC, 20004

NUMBER OF CLAIMS: 14 EXEMPLARY CLAIM: 1 . LINE COUNT: 1008

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

## ANSWER 13 OF 18 USPATFULL on STN

SUMM . . noted from labelled uptake studies that the 9,11 isomer appears to be somewhat preferentially taken up and incorporated into the phospholipid fraction of animal tissues, and to a lesser extent the 10,12 isomer. (See Ha, et al., Cancer Res., 50: 1097.

SUMM [0008] Linoleic acid is an important component of biolipids, and comprises a significant proportion of triglycerides and phospholipids. Linoleic acid is known as an "essential" fatty acid, meaning that the animal must obtain it from exogenous dietary sources.

. . is preferred because of its high native 9,12 linoleic acid SUMM content, but also because of low levels of sterols, contaminating phospholipids, and other residues that tend to foul the processing equipment and result in a less pure final product. Other seed.

. . herein, the term "oral delivery vehicle" refers to any means of DETD delivering a pharmaceutical orally, including, but not limited to, capsules, pills, tablets and syrups.

DETD . . but have greater soluability in aqueous cellular environments and can participate in alternative molecular synthetic pathways such as synthesis of phospholipids or other funtional lipids. In contrast, triglycerides are frequently deposited intact in cell membranes or storage vesicles. Thus, the administration. .

. preferred embodiment, administration is oral. The CLA may be DETD formulated with suitable carriers such as starch, sucrose or lactose in tablets, pills, dragees, capsules, solutions, liquids, slurries, suspensions and emulsions. The CLA may be provided in aqueous solution, oily solution, or in any of the other forms discussed above. The tablet or capsule of the present invention may be coated with an enteric coating which dissolves at a pH of about 6.0 to. . . intestine but not in the stomach is cellulose acetate phthalate. In some embodiments, the CLA is provided as soft gelatin capsules containing 750 mg 80% CLA (Tonalin.TM.). The CLA may also be provided by any of a number of other routes,. CLM

What is claimed is:

5. A process for producing a conjugated linoleic

acid alkylester for use in domestic animal feed, food ingredients, or human dietary supplements comprising providing an unrefined linoleic acid alkylester. . . of a monohydric low molecular weight alcohol to cause isomerization of at least 50 percent of the linoleic acid alkyl ester to conjugated linoleic alkyl ester at low temperature; acidifying by addition of an aqueous acid; separating the linoleic conjugated linoleic acid alkyl ester from said aqueous acid without distillation; and treating said conjugated linoleic acid akyl ester with lipase to form triglycerides.

ACCESSION NUMBER:

2002:301782 USPATFULL

TITLE:

Conjugated linoleic acid compositions and methods of

making same

INVENTOR(S):

Saebo, Asgeir, Oersta, NORWAY

Skarie, Carl, Detroit Lakes, MN, UNITED STATES Jerome, Daria, Owatonna, MN, UNITED STATES Haroldsson, Gudmunder, Reykjavik, ICELAND

|                     | NUMBER        | KIND   | DATE     |
|---------------------|---------------|--------|----------|
| PATENT INFORMATION: | US 2002169332 | <br>A1 | 20021114 |
|                     | US 6610868    | B2     | 20030826 |

APPLICATION INFO.: RELATED APPLN. INFO.: US 2002-124972 A1 20020418 (10)

Continuation of Ser. No. US 1999-270940, filed on 17

Mar 1999, GRANTED, Pat. No. US 6410761

Continuation-in-part of Ser. No. US 1998-132593, filed on 11 Aug 1998, PENDING Continuation-in-part of Ser. No. US 1998-160416, filed on 25 Sep 1998, PENDING Continuation-in-part of Ser. No. US 1998-42538, filed on 17 Mar 1998, ABANDONED Continuation-in-part of Ser. No. US 1998-42767, filed on 17 Mar 1998, GRANTED, Pat.

No. US 6015833

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

MEDLEN & CARROLL, LLP, Suite 350, 101 Howard Street,

San Francisco, CA, 94105

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

1

NUMBER OF DRAWINGS:

1 Drawing Page(s)

LINE COUNT:

1536

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

## ANSWER 14 OF 18 USPATFULL on STN

SUMM

. dosage of about 1 to 5 grams. In some embodiments, the conjugated linoleic acid is administered orally in a gel capsule . In other embodiments, the conjugated linoleic acid is provided as a supplement to a low carbohydrate diet. In still other. . .

SUMM

. product prostaglandins and leukotrienes have been proposed. For example, it is known that CLA is taken up in triglycerides and phospholipids, and deposited in fat stores. The precise structure and distribution of these lipids is not known. Nor is it known.

SUMM

preferred embodiment, administration is oral. The CLA may be formulated with suitable carriers such as starch, sucrose or lactose in tablets, pills, dragees, capsules, solutions, liquids, slurries, suspensions and emulsions. The CLA may be provided in aqueous solution, oily solution, as a powder, or in any of the other forms discussed above. The tablet or capsule of the present invention may be coated with an enteric coating which dissolves at a pH of about 6.0 to. . . but not in the stomach is cellulose acetate phthalate. In a preferred formulation, the CLA is provided as soft gelatin capsules containing 750 mg 80% CLA (TONALIN.TM.).

In another preferred embodiment, the CLA is provided as a powder contained in a **capsule**. The CLA may 5 also be provided by any of a number of other routes, including, but not limited to,. .

DETD CLA Capsules As Dietary Supplement For Type 2 Diabetes

DETD In this Example, CLA capsules were administered and the effect of CLA on the patient's symptoms analyzed. The patient received TONALIN.TM. capsules (80% CLA), 4 capsules of 750

mg, daily for 12 weeks. Laboratory data at the start and end of the study indicated that CLA. . .

DETD Preparation Of Capsules For Oral Use

DETD . . . anti-hyperglycemic agents. As an example, 2 mg Glimepirid may be formulated with 750 mg CLA 80 in a soft gelatin capsule.

CLM What is claimed is:

- 11. The method of claim 1 wherein said conjugated linoleic acid is administered orally in a gel capsule.
- 14. The method of claim 1 wherein said conjugated linoleic acid is provided as an ester.
- 18. The method of claim 1 wherein said conjugated linoleic acid is provided as a triglyceride or alkyl ester.
- 24. The method of claim 19 wherein said conjugated linoleic acid is administered orally in a gel capsule.
- 33. The method of claim 25 wherein said conjugated linoleic acid is administered orally in a gel capsule.
- 41. The method of claim 35 wherein said conjugated linoleic acid is administered orally in a gel capsule.
- 44. The method of claim 35 wherein said conjugated linoleic acid is provided as an ester.
- 46. The method of claim 35 wherein said conjugated linoleic acid is provided as a triglyceride or alkyl ester.

ACCESSION NUMBER:

2002:217238 USPATFULL

TITLE:

Conjugated linoleic acid in treatment and prophylaxis

of diabetes

INVENTOR(S):

Remmereit, Jan, Volda, NORWAY Wadstein, Jan, Oslo, NORWAY Klaveness, Jo, Oslo, NORWAY

PATENT ASSIGNEE(S):

Natural Corporation, Sandvira, NORWAY (non-U.S.

corporation)

PATENT INFORMATION:

55 0110331 B1

APPLICATION INFO.:

US 2000-510059

20000222 (9)

NUMBER DATE

PRIORITY INFORMATION: DOCUMENT TYPE:

US 1999-121232P 19990223 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Carlson

Carlson, Karen Cochrane

ASSISTANT EXAMINER: LEGAL REPRESENTATIVE:

Robinson, Hope A.

NUMBER OF CLAIMS:

Medlen & Carroll, LLP

EXEMPLARY CLAIM:

46 1 NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)

LINE COUNT: 783

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 15 OF 18 USPATFULL on STN

SUMM . . . noted from labelled uptake studies that the 9,11 isomer appears to be somewhat preferentially taken up and incorporated into the **phospholipid** fraction of animal tissues, and to a lesser extent the 10,12 isomer. (See Ha, et al., Cancer Res., 50: 1097. . .

SUMM Linoleic acid is an important component of biolipids, and comprises a significant proportion of triglycerides and **phospholipids**.

Linoleic acid is known as an "essential" fatty acid, meaning that the animal must obtain it from exogenous dietary sources. . .

SUMM . . . is preferred because of its high native 9,12 linoleic acid content, but also because of low levels of sterols, contaminating phospholipids, and other residues that tend to foul the processing equipment and result in a less pure final product. Other seed. . .

DETD . . . herein, the term "oral delivery vehicle" refers to any means of delivering a pharmaceutical orally, including, but not limited to, capsules, pills, tablets and syrups.

DETD . . . but have greater soluability in aqueous cellular environments and can participate in alternative molecular synthetic pathways such as synthesis of **phospholipids** or other funtional lipids. In contrast, triglycerides are frequently deposited intact in cell membranes or storage vesicles. Thus, the administration.

DETD . . . preferred embodiment, administration is oral. The CLA may be formulated with suitable carriers such as starch, sucrose or lactose in tablets, pills, dragees, capsules, solutions, liquids, slurries, suspensions and emulsions. The CLA may be provided in aqueous solution, oily solution, or in any of the other forms discussed above. The tablet or capsule of the present invention may be coated with an enteric coating which dissolves at a pH of about 6.0 to. . . intestine but not in the stomach is cellulose acetate phthalate. In some embodiments, the CLA is provided as soft gelatin capsules containing 750 mg 80% CLA (Tonalin.TM.). The CLA may also be provided by any of a number of other routes,. . .

. alkyl ester to conjugated linoleic alkylester at low temperature; acidifying by addition of an aqueous acid; and molecularly distilling said conjugated linoleic acid alkyl esters to form purified conjugated linoleic acid alkyl esters.

ACCESSION NUMBER: 2002:152815 USPATFULL

PATENT INFORMATION:

TITLE: Conjugated linoleic acid compositions and methods of

making same

INVENTOR(S): Saebo, Asgeir, Oersta, NORWAY

Skarie, Carl, Detroit Lakes, MN, United States Jerome, Daria, Owatonna, MN, United States Haroldsson, Gudmunder, Reykjavik, ICELAND

PATENT ASSIGNEE(S): Conlinco, Inc., Detroit Lakes, MN, United States (U.S. corporation)

corporation)

APPLICATION INFO.: US 1999-270940 19990317 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1998-132593, filed on 11 Aug 1998 Continuation-in-part of Ser. No. US 1998-160416, filed on 25 Sep 1998 Continuation-in-part of Ser. No. US 1998-42538, filed on 17 Mar 1998, now abandoned Continuation-in-part of Ser. No. US

1998-42767, filed on 17 Mar 1998, now patented, Pat.

No. US 6015833

DOCUMENT TYPE:

Utility

FILE SEGMENT:

GRANTED

PRIMARY EXAMINER:

Carr, Deborah D.

LEGAL REPRESENTATIVE:

Medlen & Carroll, LLP

NUMBER OF CLAIMS:

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

1 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT:

1333

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 16 OF 18 USPATFULL on STN

SUMM

. . . labeled uptake studies which indicate that the 9,11 isomer appears to be somewhat preferentially taken up and incorporated into the phospholipid fraction of animal tissues, and to a lesser extent the 10,12 isomer.

DETD

. . herein, the term "oral delivery vehicle" refers to any means of delivering a pharmaceutical orally, including, but not limited to, capsules, pills, tablets and syrups.

DETD

. administration is oral. The isomer enriched CLA may be formulated with suitable carriers such as starch, sucrose or lactose in tablets, pills, dragees, capsules, solutions, liquids, slurries, suspensions and emulsions. The isomer enriched CLA may be provided in aqueous solution, oily solution, as or in any of the other forms discussed above. The tablet or capsule of the present invention may be coated with an enteric coating which dissolves at a pH of about 6.0 to. . . in the stomach is cellulose acetate phthalate. In a preferred formulation, the isomer enriched CLA is provided as soft gelatin capsules. The isomer enriched CLA may also be provided by any of a number of other routes, including, but not limited.

CLM

What is claimed is:

15. A method of producing t10,c12 conjugated linoleic acid compositions comprising: a) providing a commodity seed oil; and b) forming a mixture of fatty acid alkylesters from said seed. fatty acid alkylesters, said conjugated fatty acid alkylesters characterized in comprising t10,c12 alkylester; d) diluting said conjugated fatty acid alkyl esters in a solvent to form a solution; and e) precipitating t10,c12 alkylester from said solution.

ACCESSION NUMBER:

2002:55070 USPATFULL

TITLE:

Methods of using isomer enriched conjugated linoleic

acid compositions

INVENTOR (S):

Saebo, Asgeir, Oersta, NORWAY

Skarie, Carl, Detroit Lakes, MN, UNITED STATES Jerome, Daria, Owatonna, MN, UNITED STATES

|                     | NUMBER        | KIND | DATE     |
|---------------------|---------------|------|----------|
| PATENT INFORMATION: | US 2002032233 | A1 / | 20020314 |
|                     | US 7094420    | B2   | 20060822 |

APPLICATION INFO.:

US 2001-949458 A1 20010907 (9)

RELATED APPLN. INFO.:

Continuation of Ser. No. US 1998-72421, filed on 4 May 1998, GRANTED, Pat. No. US 6214372 Continuation-in-part

of Ser. No. US 1998-72422, filed on 4 May 1998, GRANTED, Pat. No. US 6060514 Continuation-in-part of Ser. No. US 1999-271021, filed on 17 Mar 1999, PENDING

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE:

MEDLEN & CARROLL, LLP, Suite 350, 101 Howard Street,

San Francisco, CA, 94105

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 2 Drawing Page(s)

LINE COUNT: 929

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 17 OF 18 USPATFULL on STN

SUMM

. . . labeled uptake studies which indicate that the 9,11 isomer appears to be somewhat preferentially taken up and incorporated into the **phospholipid** fraction of animal tissues, and to a lesser extent the 10,12 isomer.

DETD

. . . herein, the term "oral delivery vehicle" refers to any means of delivering a pharmaceutical orally, including, but not limited to, capsules, pills, tablets and syrups.

DETD

. . . administration is oral. The isomer enriched CLA may be formulated with suitable carriers such as starch, sucrose or lactose in tablets, pills, dragees, capsules, solutions, liquids, slurries, suspensions and emulsions. The isomer enriched CLA may be provided in aqueous solution, oily solution, as or in any of the other forms discussed above. The tablet or capsule of the present invention may be coated with an enteric coating which dissolves at a pH of about 6.0 to. . . in the stomach is cellulose acetate phthalate. In a preferred formulation, the isomer enriched CLA is provided as soft gelatin capsules. The isomer enriched CLA may also be provided by any of a number of other routes, including, but not limited. . .

CLM

What is claimed is:

20. A conjugated linoleic acid composition produced by the process comprising: a) providing a commodity seed oil; and b) forming a mixture of fatty acid. . . fatty acid alkylesters, said conjugated fatty acid alkylesters characterized in comprising t10,c12 alkylester; d) diluting said conjugated fatty acid alkylesters in a solvent to form a solution; and e) precipitating t10,c12 alkylester from said solution.

ACCESSION NUMBER:

2001:165902 USPATFULL

TITLE:

INVENTOR (S):

Isomer enriched conjugated linoleic acid compositions

Saebo, Asgeir, Oersta, Norway

Skarie, Carl, Detroit Lakes, MN, United States Jerome, Daria, Owatonna, MN, United States

|        |              |    | NUMBER     | KIND | DATE     |
|--------|--------------|----|------------|------|----------|
| PATENT | INFORMATION: | US | 2001025113 |      | 20010927 |
|        |              | US | 6333353    | B2   | 20011225 |

APPLICATION INFO.:

US 2001-772608 A1 20010130 (9)

RELATED APPLN. INFO.:

Continuation of Ser. No. US 1999-270941, filed on 17

Mar 1999, GRANTED, Pat. No. US 6225486

Continuation-in-part of Ser. No. US 1998-72422, filed

on 4 May 1998, GRANTED, Pat. No. US 6060514

Continuation-in-part of Ser. No. US 1998-72421, filed

on 4 May 1998, GRANTED, Pat. No. US 6214372

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

MEDLEN & CARROLL, LLP, Suite 2200, 220 Montgomery

Street, San Francisco, CA, 94104

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

28 1

NUMBER OF DRAWINGS:

2 Drawing Page(s)

LINE COUNT: 954

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 18 OF 18 USPATFULL on STN

SUMM . . . labeled uptake studies which indicate that the 9,11 isomer

appears to be somewhat preferentially taken up and incorporated into the phospholipid fraction of animal tissues, and to a lesser extent the 10,12 isomer.

DETD . . method of administration is oral. The CLA may be formulated with suitable carriers such as starch, sucrose or lactose in tablets, capsules, solutions and emulsions. The tablet or capsule of the present invention may be

coated with an enteric coating which dissolves at a pH of about 6.0 to.

CLM What is claimed is:

> 4. A composition for a human or animal diet comprising a food product and a conjugated linoleic acid component, wherein said conjugated linoleic acid component comprises about greater than 92% esters of the t10,c12 isomer.

- 7. A composition for daily use in a human or animal diet comprising a food product and a conjugated linoleic acid component, wherein said conjugated linoleic acid component comprises essentially about 0.01 to 10 gram equivalents of t10,c12 conjugated linoleic acid provided as an ester, wherein said ester is selected from the group consisting of a methyl ester and an ethyl ester.
- 10. An animal feed for daily use in an animal diet comprising a conjugated linoleic aid component, wherein said conjugated linoleic acid component comprises about 0.01 to 10 gram equivalents of t10,c12 conjugated linoleic acid provided as an ester, wherein said ester is selected from the group consisting of a methyl ester and an ethyl ester.
- 13. A supplement for daily use in an animal diet comprising a conjugated linoleic aid component, wherein said conjugated linoleic acid component comprises about 0.01 to 10 gram equivalents of t10,c12 conjugated linoleic acid provided as an ester, wherein said ester is selected from the group consisting of a methyl ester and an ethyl ester.

ACCESSION NUMBER: 2001:82946 USPATFULL

TITLE: Isomer enriched conjugated linoleic acid compositions

INVENTOR(S): Jerome, Daria, Owatonna, MN, United States

Skarie, Carl, Detroit Lakes, MN, United States

PATENT ASSIGNEE(S): ConlinCo., Inc., Detroit City, MN, United States (U.S.

corporation)

NUMBER KIND DATE ------US 6242621 B1 20010605

PATENT INFORMATION:

APPLICATION INFO.: US 1999-438101 19991110 (9)

Continuation of Ser. No. US 1998-72422, filed on 4 May RELATED APPLN. INFO.:

1998, now patented, Pat. No. US 6060514

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Carr, Deborah D. LEGAL REPRESENTATIVE: Medlen & Carroll, LLP

NUMBER OF CLAIMS: